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NEW VENEZUELAN GERRIDAE (HEMIPTERA)

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This paper is a report on a collection of waterstriders of the family Gerridae taken by the junior author in Venezuela. In addition to the new forms, several other interesting species are also listed: Gerris kahli Drake and Harris, El Limon, Maracay, Aragua, altitude 450 meters, Nov. 11, 1953; Bejarana, Miranda, altitude 1,200 meters, Oct. 8, 1952; and San Antonio de los Altos, Miranda, 1,200 meters, May 2, 1953. Cylindrostethus palmaris Drake and Harris, alate specimens only, El Limon, Maracay, 450 meters, Nov. 11, 1953. Potamobates horvathi Esaki, Aparicion, Portoguesa, May 2, 1953. Charmatometra bakeri Kirkaldy, Guacharo, Monages, Aug. 5, 1953; and La Culebra, Miranda, 1,200 meters, July 4, 1952. Brachymetra anduzeei Drake and Harris, El Limon, Maracay. Aragua, 450 meters, Nov. 11, 1953; Cerro Avila, Dist. Fed. 1,200 meters, Aug. 16, 1952; La Culebra, Miranda, altitude 1,000 meters, July 4, 1952; Puerto de Hierro, Sucre, Aug. 10, 1951; Guatopo, Guarico, 1,300 meters, June 1, 1952; and El Trompillo, Carabobo, 1,300 meters, June 26, 1952. Trepobates trepidus Drake and Harris, Cerro Avila, Fed. Dist., 1,200 meters, Aug. 16, 1952; El Trompillo, Carabobo, 450 meters, June 26, 1952; and Tinoco, Cojedes, May 3, 1953.



Fig. 1. Metrobates curracis, n. sp. Right paramere of male.

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Metrobates curracis, n. sp. (Fig. 1)

Blackish with median part of pronotum, a wide median longitudinal stripe and a narrower one on each side of mesonotum, most of metanotum, nearly entire dorsal surface of pronotum, and almost entire body beneath bluish pruinose. Pubescence, short, brownish or grayish. Antennae blackish fuscous with basal fourth of first segment and basal third of second testaceous; segment I with long pale hairs on inferior surface; II and III with usual apical modifications, measurements—I, 40; II, 30; III, 22; IV, 30.

Pronotum short, narrower than head including eyes, twice as wide as long (70:30), with a quadrate brownish spot in discal impression. Mesonotum large, slowly widening posteriorly, twice as wide at base as median longitudinal length (140:72); mesosternum with a distinct median longitudinal line, unarmed. Anterior legs dark fuscous with coxae, trochanters and nearly basal half of femora testaceous; femora without ventral spine, with usual enlargement at apex. Middle legs dark fuscous with trochanters testaceous; femora and tibiae within with long hairs; femora 2.75 mm. long, the tibiae 4.20 mm. Hind legs also dark fuscous with trochanters testaceous, the femora 4.25 mm. in length. Last segment of venter almost twice as long as preceding. Male parameres widened apically, widest at apex (Fig. 1).

Female: Broader than male, but with color, markings and antennal measurement practically the same as in male. Last segment of venter almost three times as long as preceding. Winged form unknown in both sexes.

Length: 3.20-3.70 mm.; width 1.80-2.10 mm.

Type (male) and *allotype* (female), both apterous, Caño Araguao, Delta Amacuro, Venez., Dec. 27, 1952, in Drake Collection. *Paratypes*: male and female, same data as type.

The male parameres (fig. 1) of this waterstrider are very distinctive and separate it at once from all of its congeners. This is the fourth species of the genus *Metrobates* Uhler recorded from South America, the first record for Venezuela.

Potamobates vivatus, n. sp.

Apterous form: Bluish black with a large median spot (isoscles triangle) and either a large median spot or short broad stripe on anterior part of head flavotestaceous; a moderately wide stripe on each side of both thorax and abdomen, narrow hind margin of mesonotum, dorsal surface of both meso- and metathoracic acetabula, and a narrow stripe on each side of abdominal tergites clothed with bright silvery pubescence tinged with bluish pruinose. Entire body beneath and inferior parts of sides of both thorax and first genital segment flavotestaceous. Length, 12.00 mm. (male; apex of head to end of genital segments and 8.75 mm. (female; including extremely long posterior projection of genital segment); width, 2.60 mm. (male) and 3.10 mm. (female).

Head with greatest width across eyes longer than median length (130: 104); vertex less than the width of an eye. Rostrum blackish with base testaceous, scarcely reaching to front coxae. Antennae blackish fuscous,

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measurements—I, 144; II, 52; III, 50; IV, 70. Anterior legs: coxae and trochanters testaceous, the latter with a narrow fuscous stripe on inferior side; femora stout, largely testaceous with inferior surface blackish, 2.75 mm. long. Middle and hind legs very long, slender, dark fuscous with coxae and most of trochanters testaceous; length of middle femora 9.50 mm., the tibiae 6.50 mm. Length of hind femora 10.00 mm., the tibiae 5.50 mm.

Male: Abdomen beneath sulcate on median line, deeply roundly notched at middle behind, median length above 2.30 mm.; connexiva moderately wide, slightly produced behind, there obliquely truncate. First genital segment very long, thick, subcylindrical, slightly longitudinally convex above, a little concave beneath, produced posteriorly on hind margin of right side (just under dorsal edge) into a moderately large projection, which terminates in a point and is directed slightly downward, the median dorsal length of segment twice the width at middle (90:45); second genital segment produced on left side into a flat, tapering, arcuate projection (broad at base) which curves upward in a latero-posteriorly direction and terminates in a slender tip above the projection on the right side of the first genital segment.

Female: Body a little stouter and shorter than male; color, markings and antennal segments very similar. Connexiva produced posteriorly in a long subcylindrical process (longer than last tergite), and also clothed with longer pubescent hairs. Genital segment brownish or testaceous with the apical two-fifths blackish, produced posteriorly into an extremely long, rounded, tapering, stemlike process, the stem of which is 2.35 mm. long and nearly as long as the abdominal tergites conjoined, the entire segment (including hind projection) as long as the abdomen. Winged forms unknown.

Type (male) and *allotype* (female), Avila, D. F., Venezuela, in Drake Collection. *Paratypes:* 12 specimens, taken with type, and from Belen, Carabobo.

This species may be distinguished at once from P. peruvianus Hungerford and other members of the genus by the position of the projection on right end of the first genital segment in male, and the inordinately long, posteriorly-pointed, stemlike process of the female genital segment. The modification of the female genital segment is peculiar to vivatus.